

**FEDERAL COMMUNICATIONS COMMISSION
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October 2, 1997

Misty Jennings, Manager
Southwestern Bell Mobile Systems
17330 Preston Road
Suite 100A
Dallas, Texas 75252

In re: Section 22.371 Inquiry
Regarding Protection to AM Radio
Broadcast Stations

Dear Ms. Jennings:

This is in reference to your April 23, 1997 request on behalf of Southwestern Bell Mobile Systems for clarification of conditions that must be met prior to construction of any communications tower located near an AM broadcast facility.

For many years now, the Commission has required licensees in services outside the radio broadcast service to protect the operations of prior-constructed AM broadcast facilities. See 47 CFR Section 22.371, which codified a Public Notice entitled *Republication of Standard Broadcast Reradiation and Tower Construction Authorized under Part 22 of the Rules*, 66 RR 2d 1777, released November 14, 1989. This rule section is based upon the standard AM broadcast conditions which have been imposed on the construction permits for broadcast stations, as a matter of longstanding policy.

Because of a recent change adopted by the Commission in processing procedures for AM, FM, and TV broadcast stations, the Commission has codified these conditions into a new rule section, 47 CFR Section 73.1692 (copy attached). While technically this rule section was established for the broadcast services only, adherence to these conditions by licensees and permittees of other services will prevent disruptions of service to the public and operation by the AM station outside of its licensed parameters. It will also help to avoid costly litigation. Moreover, by taking the "before-construction" measurements required in Section 73.1692, the party constructing the tower can establish whether the AM station is currently operating within

its licensed parameters, and thus protect itself against claims by the station that the construction caused its radiation pattern to become out of tolerance. Similarly, the "after-construction" measurements confirm that the AM station either is operating in accordance with its license, or remains unchanged from the "before construction" conditions, thereby proving that the construction of the new tower did not adversely affect the AM station.

If the proposed tower's coordinates (in the NAD 27 coordinate system) are known, you may utilize the distance search option on our AM Query, which is available through the Internet at <http://www.fcc.gov/mmb/asd/amq.html> , to determine whether the construction could have an effect on any nearby AM stations.

Sincerely,

Dennis Williams
Assistant Chief
Audio Services Division
Mass Media Bureau

Enclosure

§ 73.1692 Broadcast Station Construction Near or Installation On an AM Broadcast Tower. Where a broadcast licensee or permittee proposes to mount a broadcast antenna on an AM station tower, or where construction is proposed within 0.8 km of an AM nondirectional tower or within 3.2 km of an AM directional station, the broadcast licensee or permittee is responsible for ensuring that the construction does not adversely affect the AM station, as follows:

(a) **Installations on an AM Nondirectional Tower.** During installation of the broadcast antenna and related equipment, the AM station shall determine operating power by the indirect method (see § 73.51). Upon the completion of the installation, antenna impedance measurements on the AM antenna shall be made, and, prior to or simultaneously with the filing of the license application covering the broadcast station installation, an application on FCC Form 302-AM (including a tower sketch of the installation) shall be filed with the Commission for the AM station to return to direct power measurement.

(b) **Installations on an AM Directional Array.** Prior to commencing construction, the broadcast permittee or licensee shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method (see § 73.51) and request special temporary authority pursuant to § 73.1635 to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. Both prior to the commencement of construction and upon completion of construction, a partial proof of performance (as defined by § 73.154) shall be conducted to establish that the AM array has not been adversely affected. Prior to or simultaneously with filing of the license application to cover the broadcast station construction, the results of the partial proof of performance shall be filed with the Commission on Form 302-AM.

(c) **Tower Erections or Modifications Within 0.8 km of an AM Nondirectional Tower.** Prior to commencing the construction of tower modifications, or the erection of a new tower, within 0.8 km of an AM nondirectional tower, the broadcast permittee or licensee is required to notify the AM station so that the AM station may commence determining operating power by the indirect method (see § 73.51). The broadcast licensee or permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects on the radiation pattern of the AM station. Both prior to construction of the tower modifications and upon completion of construction, antenna impedance measurements of the AM station shall be made. In addition, sufficient field strength measurements taken at a minimum of 10 locations along each of 8 equally spaced radials, shall be made to establish that the AM radiation pattern is essentially omnidirectional. Prior or simultaneously with the filing of the application for license to cover this permit, the results of the impedance measurements and the field strength measurements shall be filed with the Commission on FCC Form 302-AM for the AM station to return to the direct method of power determination.

(d) **Tower Erections or Modifications Within 3.2 km of an AM Directional Station.** Prior to commencing construction of tower modifications, or the erection of a new tower structure, within 3.2 km of an AM directional array, the broadcast permittee or licensee shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method (see § 73.51) and request special temporary authority pursuant to § 73.1635 to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. The broadcast licensee or permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects upon the radiation pattern of the AM station. Both prior to the commencement of construction and upon completion of construction, a partial proof of performance (as defined by § 73.154) shall be conducted to establish that the AM array has not been adversely affected. Prior to or simultaneously with filing of the license application to cover the broadcast station construction, the results of the partial proof of performance shall be filed with the Commission on Form 302-AM.